

0a CASE 7331: BASS ENTERPRISES PRODUCTION
COMPANY FOR UNORTHODOX LOCATION AND
POSSIBLE DUAL COMPLETION OR DOWNHOLE
COMMING INC. ROOSEVELT COUNTY, NEW MEX.

~ C. 2

Case No.

7331

Application

Transcripts.

Small Exhibits

ETC

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION

IN THE MATTER OF THE HEARING
CALLED BY THE OIL CONSERVATION
DIVISION FOR THE PURPOSE OF
CONSIDERING:

CASE NO. 7331
Order No. R-6775

APPLICATION OF BASS ENTERPRISES
PRODUCTION COMPANY FOR AN UNORTHODOX
LOCATION AND POSSIBLE DUAL COMPLETION
OR DOWNHOLE COMINGLING, ROOSEVELT
COUNTY, NEW MEXICO.

ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 9 a.m. on August 26, 1981,
at Santa Fe, New Mexico, before Examiner Richard L. Stamets.

NOW, on this 30th day of September, 1981, the Division Director,
having considered the testimony, the record, and the recommendations
of the Examiner, and being fully advised in the premises,

FINDS:

- (1) That due public notice having been given as required by law,
the Division has jurisdiction of this cause and the subject matter
thereof.
- (2) That the applicant, Bass Enterprises Production Company,
seeks approval of an unorthodox location for its Bass State Well No. 2,
554 feet from the South line and 554 feet from the East line of Section
16, Township 7 South, Range 35 East, NMPM, to test the upper and lower
zones of the San Andres formation, said well being plugged back from
the Wolfcamp formation and completed in the Todd Upper and/or Todd
Lower San Andres Pools, Roosevelt County, New Mexico.
- (3) Applicant further seeks authority to dually complete said
well in both of said pools or, if of similar nature, i.e., gas-gas
or oil-oil, to comingling the production from said pools in the wellbore.
- (4) That the E/2 SE/4 of said Section 16 would be dedicated to
an oil completion and the E/2 of the section to a gas completion.
- (5) That said well was originally drilled at a standard
location for the Wolfcamp formation.
- (6) That no offset operator objected to the proposed unorthodox
location.

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Case No. 7331

Order No. R-6775

(7) That the mechanics of the proposed dual completion are feasible and in accord with good conservation practices.

(8) That the Division Director should be authorized to administratively approve the down-hole commingling in the wellbore of production from the upper and lower San Andres zones upon application and a proper showing.

(9) That approval of the subject application will afford the applicant the opportunity to produce its just and equitable share of the oil and/or gas in the subject pools, will prevent the economic loss caused by the drilling of unnecessary wells, avoid the augmentation of risk arising from the drilling of an excessive number of wells, and will otherwise prevent waste and protect correlative rights.

IT IS THEREFORE ORDERED:

(1) That an unorthodox location is hereby approved for the Bass Enterprises Production Company (operator for Perry R. Bass) Bass State Well No. 2 located at a point 554 feet from the South line and 554 feet from the East line of Section 16, Township 16 South, Range 35 East, NMPM, Todd-Upper San Andres Gas Pool and Todd-Lower San Andres Associated Pool, Roosevelt County, New Mexico.

(2) That the E/2 SE/4 of said Section 16 shall be dedicated to an oil completion and the E/2 of the section to a gas completion.

(3) That the applicant, Bass Enterprises Production Company, is hereby authorized to complete said Bass State Well No. 2 as a dual completion (conventional) to produce the upper San Andres gas zone through the casing tubing annulus and the lower San Andres zone through tubing with separation of the zones to be achieved by means of a packer set at approximately 4216 feet.

PROVIDED HOWEVER, that the applicant shall complete, operate, and produce said well in accordance with the provisions of Rule 112-A of the Division Rules and Regulations insofar as said rule is not inconsistent with this order;

PROVIDED FURTHER, that the applicant shall take packer leakage tests upon completion and annually thereafter during the last Gas-Liquid ratio test period for wells in the Todd-Lower San Andres Associated Pool.

(4) That the Division Director is hereby authorized to administratively approve the down-hole commingling in the wellbore of production from the upper and lower San Andres zones upon application and a proper showing:

(a) that both zones are classified as oil zones or gas zones;

(b) that pressures of the two zones are compatible;

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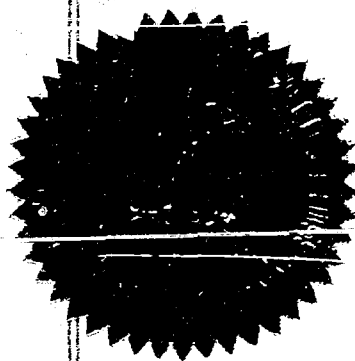
Case No. 7331
Order No. R-6775

(c) of evidence establishing the ratio of production to be assigned each zone; and,

(d) that the combined value of the production shall not be diminished by the proposed commingling.

(5) That jurisdiction of this cause is retained for the entry of such further orders as the Division may deem necessary.

DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.



STATE OF NEW MEXICO
OIL CONSERVATION DIVISION

Joe D. Ramsey
Joe D. Ramsey
Director

S E A L

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION
STATE LAND OFFICE BLDG.
SANTA FE, NEW MEXICO
26 August 1981

EXAMINER HEARING

IN THE MATTER OF:

Application of Bass Enterprises
Production Company for an unorthodox
location and possible dual completion
or downhole commingling, Roosevelt
County, New Mexico.

CASE
7331

BEFORE: Richard L. Stamets

TRANSCRIPT OF HEARING

A P P E A R A N C E S

For the Oil Conservation
Division:

W. Perry Pearce, Esq.
Legal Counsel to the Division
State Land Office Bldg.
Santa Fe, New Mexico 87501

For the Applicant:

Conrad E. Coffield, Esq.
HINKLE, COX, EATON, COFFIELD, &
HENSLEY
P. O. Box 3580
Midland, Texas 79701

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I N D E X

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JANEEN JUDAH

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Direct Examination by Mr. Coffield

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Cross Examination by Mr. Stamets

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E X H I B I T S

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Applicant Exhibit One, Plat

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Applicant Exhibit One-A, Plat

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Applicant Exhibit Two, Log

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Applicant Exhibit Two-A, Log

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Applicant Exhibit Two-B, Log

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Applicant Exhibit Three, Sketch

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Applicant Exhibit Four, Sketch

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Applicant Exhibit Four-A, Sketch

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2 MR. STAMETS: We'll call Case 7331.

3 MR. PEARCE: Application of Bass Enter-
4 prises Production Company and possible dual completion or
5 downhole commingling, Roosevelt County, New Mexico.

6 MR. COFFIELD: Conrad Coffield, with the
7 Hinkle law firm, appearing on behalf of the applicant, and
8 I have one witness to be sworn.

9
10 (Witness sworn.)

11
12 JANEED JUDAH
13 being called as a witness and being duly sworn upon her oath,
14 testified as follows, to-wit:

15
16 DIRECT EXAMINATION

17 BY MR. COFFIELD:

18 Q Ms. Judah, would you please state your
19 name, your occupation and employer?

20 A My name is Janeen Judah, and I'm a
21 petroleum engineer with Bass Enterprises Production Company,
22 Post Office Box 2760, Midland, Texas, 79702.

23 Q Have you previously testified before
24 the Division as an engineer?

25 A No, I have not.

Q For the Examiner's benefit, would you please give a brief resume of your educational background and work experience?

A I attended Texas A&M University and graduated in December of 1980 with a BS degree in petroleum engineering.

I've been a member of the Society of Petroleum Engineers of AIME since 1977. Since joining Bass last January my production responsibilities have consisted solely of New Mexico properties, including the Bass State No. 2 Well.

Q Are you familiar with -- you say you're familiar then with this property and the proposed well location involved?

A Yes, sir, I am.

Q And are you familiar with Bass' application in this case?

A Yes, sir, I am.

MR. COFFIELD: Does the Examiner have any other questions of the --

MR. STAMETS: No, the witness is considered qualified.

MR. COFFIELD: Mr. Examiner, before we begin with the case here, I want to point out what turns out

1
2 to be an error in the description of the acreage which we
3 indicated in the application would be dedicated to the well, if
4 it turns out to be an oil well. It says there the southeast
5 of the southeast of Section 16 to be dedicated as an oil com-
6 pletion, and in fact it turns out that with 80-acre spacing
7 for this particular formation, so that would have to be the
8 east half of the southeast quarter be dedicated to the well.

9 And if the Examiner please, we'd like to
10 present the case with that amendment to the application.

11 MR. STAMETS: Okay, I don't see that
12 that is a significant error in the advertisement and we'll
13 proceed along those lines.

14 MR. COFFIELD: Thank you.

15 Q Ms. Judah, what is it that Bass Enter-
16 prises Production Company seeks by this application?

17 A. Bass seeks approval for the unorthodox
18 location of its Bass State No. 2 Well, located 554 feet from
19 the south line and 554 feet from the east line of Unit C,
20 Section 16, Township 7 South, Range 35 East, Roosevelt County
21 New Mexico, for the Todd Upper San Andres Pool.

22 Bass also seeks permission to dually
23 complete the well by means of a conventional tubing-tubing-
24 casing annulus in the event that the well is productive of
25 oil from one pool and gas from the other from the Todd Lower

San Andres and Todd Upper San Andres Pools respectively.

In the alternative event that the zones both produce either oil or gas, Bass seeks permission to downhole commingle both zones.

The acreage dedicated to this well includes the east half, 320 acres, for a gas well, and the east half of the southeast quarter, 80 acres, for an oil well.

Q. Ms. Judah, would you please give a brief history of this particular well?

A. Bass State No. 2 was spudded on June 19th, 1981, and reached a total depth of 8250 feet in the Granite Wash on July 17th, 1981.

The well's primary objective was the Wolfcamp and the well was drilled and permitted as such. After logging the Wolfcamp pay zones were tested and found to be unproductive.

The well was subsequently plugged back to the San Andres and casing was set. Upon receipt of a copy of the logs, Paul Kautz, geologist with the New Mexico Oil Conservation Division in Hobbs advised us that the well was to be included in both the Todd Upper and Lower San Andres Pools. The complications of completing the well resulting from this decision resulted in our case before you today.

Q All right. Now, Ms. Judah, would you please refer to what we've marked as Exhibits One and One-A and explain these exhibits to the examiner?

A Exhibit One is a land plat of Township 7 South, Range 35 East, Roosevelt County, New Mexico, with Bass acreage outlined in yellow. As described by the legend, the wells in this area are identified by pool and status. Those wells that are currently active are indicated by a circle; those that are not currently active are indicated by a square, whether they are plugged and abandoned, temporarily abandoned, or merely shut-in.

Those in the Todd Lower San Andres Pool are indicated in red; those in the Todd Upper San Andres Pool are in green; those in the Todd - Wolfcamp Pool are indicated in blue; those in the northwest Todd San Andres Pool are in purple; those in the Baker San Andres Pool are in pink.

Exhibit One-A is a plat showing the orthodox locations and proration units for the Todd Field area. I will demonstrate for clarity, using the overlays here.

The gas proration unit for the Upper Pool is as shown in yellow, is the east half 320 acres, and the oil proration unit, which would be for the lower pool, is the east half of the southeast quarter, 80 acres, which is shown

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2 in blue.

3 The orthodox locations for the Todd
4 Upper San Andres Pool, which is the northeast quarter and
5 southwest quarter of any given section, are outlined in green.
6 The orthodox locations for the Todd Lower San Andres and
7 Northwest Todd San Andres are shown by the red and blue circles
8 respectively.

9 There are no special rules for the Todd-
10 Wolfcamp Pool in this area.

11 The nearest orthodox location for the
12 indicated pools in the east half proration unit is 2086 feet
13 from the north line and 554 feet from the east line, which
14 would be about right here.

15 Q Okay, Ms. Judah, is -- recapping, using
16 this same exhibit, would you please explain to the Examiner
17 exactly what the current well location is orthodox as to?

18 A Okay. The well location as it is now
19 is orthodox for the Todd Lower San Andres and the Northwest
20 Todd San Andres Pools. It is unorthodox for the Todd Upper
21 San Andres Pool because by the pool rules for that pool only
22 the northeast and southwest quarters are orthodox.

23 Q Okay, now go to what we've marked as
24 Exhibits Two, Two-A, and Two-B and explain what these repre-
25 sent.

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2 A. Exhibits Two, Two-A, and Two-B are the
3 open hole compensated neutron formation density dual laterlog
4 micro-SFL and botton hole compensated sonic logs run on the
5 Bass State No. 2. Formation tops are indicated as well as the
6 proposed perforations and the New Mexico Oil Conservation
7 Division given boundary between the Todd Upper San Andres Pool
8 and the Todd Lower San Andres Pool.

9 Please note the minimal vertical separa-
10 tion between the two pools, only 26 feet between our chosen
11 perforations. With this small spacing and the fracture treat-
12 ments necessary to make wells in the area productive in the
13 San Andres, insuring positive separation of the two zones
14 cannot be guaranteed. Mechanical separation of the two zones
15 is difficult, if not impossible. Bass requests that we be
16 allowed to commingle the two zones if upon production testing
17 the zones prove to produce compatible hydrocarbons. Upon
18 commingling production would be allocated to each zone by the
19 initial potential test.

20 Q. All right, Ms. Judah, now go to Exhibit
21 Three and explain that exhibit to the examiner.

22 A. If a dual completion is deemed necessary,
23 Exhibit Three is a diagrammatic sketch of the well as it is
24 planned for dual completion.

25 The sketch shows the location of perfor-

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2 ations, packers, and production from each zone.

3 In the event that the upper zone pro-
4 duces excessive fluid, provisions have been made for the in-
5 stallation of a siphon string to the zone to allow for swabbing,
6 if necessary. Bass will wireline set the packer and check the
7 depth with a gamma ray casing collar locator log to insure
8 the correct setting depth.

9 Q Next, Ms. Judah, we have Exhibits Four
10 and Four-A. Would you please explain those?

11 A Exhibit Four is a graphical sketch
12 showing the relationship between the internal yield of the
13 casing and the anticipated pressure as a function of depth.
14 Exhibit Four shows the calculations for internal yield of
15 the casing and anticipated pressure. Internal yield is cal-
16 culated using Barlow's formula.

17 Q Tell me what studies you might have done
18 on this well relative to the economics of the well.

19 A I've studied the completion economics
20 of the well, and the incremental cost of dually completing
21 the well as opposed to downhole commingling of the two zones,
22 is \$62,500. The cost of drilling and completing an additional
23 well to the Lower San Andres would be \$450,000.

24 Q Ms. Judah, in this instance, in connection
25 with this particular well, if -- if the Commission, the Divi-

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2 sion deems that dually completing the well is the best way
3 to approach this particular situation, is Bass prepared to
4 test the casing in the dual completion in accordance with the
5 Division's rules and regulations?

6 A. Yes, Bass will test the casing as re-
7 quired by the Oil Conservation Division.

8 Q. Were these exhibits all prepared by you
9 or under your supervision?

10 A. Yes, sir, they were.

11 Q. In your opinion will the approval of this
12 application by Bass prevent drilling unnecessary wells and
13 otherwise prevent waste and protect correlative rights?

14 A. Yes, sir, it will.

15 MR. COFFIELD: Mr. Examiner, I move the
16 admission of the exhibits, One through Four.

17 MR. STAMETS: These exhibits will be
18 admitted.

19 MR. COFFIELD: I have no other questions
20 of Ms. Judah on direct.

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22 CROSS EXAMINATION

23 BY MR. STAMETS:

24 Q. Ms. Judah, would you reiterate under
25 what circumstances you desire downhole commingling?

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A. If upon production testing the two zones, for example, both produce gas, we'd like to be able to commingle them, or both oil. If it's unlike substances we don't desire to commingle it.

Q. And at this point you have not been able to -- you don't have any tests on either zone?

A. No, sir, we have not attempted completion on the well because the procedures would be different depending on the ruling of this hearing.

Q. Okay. Do you have any evidence from nearby wells or other sources as to what pressures and productivity you might expect in these two zones?

A. Yes, sir, there are several wells in the vicinity; however, the closest producing well from either pool is almost two miles away. Historically the wells in this area have not been very prolific producers. They've been low volume, long-term producers. From the lower zone maybe 20 barrels a day would be a reasonable average in this area. Those in the upper zone produce, perhaps in the vicinity of 100 Mcf a day. Those are rough estimates.

Q. It does appear that this well is located rather distant from especially the Todd Lower San Andres wells. I would assume that the pool boundary must have been somewhat beyond what's currently producing.

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2 A The pool boundary for the Todd Lower San
3 Andres Pool extends, it -- the Todd Lower San Andres Pool in-
4 cludes all of Section 22.

5 Q Okay.

6 A And also the Upper San Andres Pool in-
7 cludes all of Section 22, but Northwest Todd San Andres Pool
8 includes only the northwest quarter of Section 16. So the
9 three quarters of Section 16 are in no given pool at this time.

10 Q Is the ownership common throughout the
11 Section 16 as to working interest, royalty interest?

12 A It is 100 percent Bass interest.

13 Q How about the royalty interest?

14 A It's State and it's all --

15 Q So that there's no difference between,
16 say, the east half of the southeast quarter and --

17 A No.

18 Q -- the east half of the section?

19 A Huh-uh.

20 Q In the completion process, assuming that
21 downhole commingling was given as an option, would you be able
22 to test each zone separately and determine what pressures
23 and productivity were?

24 A Theoretically that will be possible but
25 there's always the possibility that given the small vertical

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2 separation that we have, that when we frac these wells, we
3 could frac through the anhydrite zone that separates them and
4 have communication between the two zones. We wouldn't know
5 that until we attempted a completion.

6 Q Would you be perforating and treating
7 each zone separately or both zones at the same time?

8 A We are prepared to do it as you rule.
9 We have -- the procedure as it's written now is to do them
10 both separately.

11 Q And you're not aware of any other wells
12 in the area where the two zones have been downhole commingled?

13 A No, sir, there are no dual completions
14 in the area and to my knowledge there are no wells that at-
15 tempted production from both zones.

16 MR. STAMETS: Any other questions of
17 this witness? She may be excused.

18 Anything further in this case?

19 The case will be taken under advisement.
20

21 (Hearing concluded.)
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C E R T I F I C A T E

I, SALLY W. BOYD, C.S.R., DO HEREPY CERTIFY that
the foregoing Transcript of Hearing before the Oil Conserva-
tion Division was reported by me; that the said transcript
is a full, true, and correct record of the hearing, prepared
by me to the best of my ability.

Sally W. Boyd CSR

SALLY W. BOYD, C.S.R.
Rt. 1 Box 193-B
Santa Fe, New Mexico 87501
Phone (505) 455-7409

I do hereby certify that the foregoing is
a complete record of the proceedings in
the Examiner hearing of Case No. 7331,
heard by me on 8-26-1981.
Richard L. Stamm Examiner
Oil Conservation Division

NEW MEXICO OIL CONSERVATION COMMISSION

EXAMINER HEARING

SANTA FE, NEW MEXICO

Hearing Date

AUGUST 26, 1981

Time: 9:00 A.M.

NAME	REPRESENTING	LOCATION
Donald Coffey W. J. Kellin	W. J. Kellin Kellin & Kellin	Midland, Texas Santa Fe
Paul M. Byrnes	El Paso Natural Gas Co.	El Paso, TX
V. Sue Reed	Loco Hills Water Disposal	Loco Hills
Al Kendrick	CECOSA Brantford	Anteo, N.M.
Kevin H. McLeod	Four Corners Gas Producers	Farmington, N.M.
James I. Dwyer	Jennings & Christy	Foswell
Byron L. Plumley	ARCO Oil & Gas Co.	Denver, CO.
Steve Rowland	BEDCO	Midland, TX
Robert Buettner	Koch Industries	Wichita, KS
Bob Huber	Byram	SANTA FE
William L. Farr	Farabee, Fry & Co. P.C.	Santa Fe
Perry Reese	END	Santa Fe
J. W. LAW	NEW MEXICO STATE LAND	SANTA FE
WB Daniel III	OFFICE Mitchell Energy	Houston, TX
J. Dwyer	OCO	Astco
J. Smith		

NEW MEXICO OIL CONSERVATION COMMISSION

EXAMINER HEARING

SANTA FE, , NEW MEXICO

Hearing Date

AUGUST 26, 1981

Time: 9:00 A.M.

NAME	REPRESENTING	LOCATION
Joe Lara	USGS	Albuquerque
JANEEN JUDAH	BASS ENTERPRISES	MIDLAND
Jack R Gevecker	Bass Enterprises	Midland
Jeff A Edmister	NM OCO	Aztec
Self-Held	State Land Office	SF.
Lloyd Thompson	Union Oil Co. of Calif	Midland
Edward J. Mathews	Union Oil Co of Calif	Midland
Sumner G. Baer	Jasper, Buell	Santa Fe
J. Roger Artley	Great Western Prtg Co.	Midland, Tx.
E. J. Witter	Citrus Service	MIDLAND, TX
Ray Wipkeel	Loco Hills Water	Loco Hills
Doyle Hart	Same	Midland, TX
Ja Davidson	Doyle Hartman	"
Larry A. Neman	Doyle Hartman	Midland, Tex
Wm. P. Aycock	Radtke, Aycock & Assoc., Inc	Midland, TX.
Bice Seeliger	Coquina	"
Charles W. Seeliger	"	"

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION
STATE LAND OFFICE BLDG.
SANTA FE, NEW MEXICO
26 August 1981

EXAMINER HEARING

IN THE MATTER OF:

Application of Bass Enterprises
Production Company for an unorthodox CASE
location and possible dual completion 7331
or downhole commingling, Roosevelt
County, New Mexico.

BEFORE: Richard L. Stamets

TRANSCRIPT OF HEARING

A P P E A R A N C E S

For the Oil Conservation Division: — W. Perry Pearce, Esq.,
Legal Counsel to the Division
State Land Office Bldg.
Santa Fe, New Mexico 87501

For the Applicant: Conrad E. Coffield, Esq.
HINKLE, COX, EATON, COFFIELD, &
HENSLEY
P. O. Box 3580
Midland, Texas 79701

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I N D E X

JANEEN JUDAH

Direct Examination by Mr. Coffield	3
Cross Examination by Mr. Stamets	11

E X H I B I T S

Applicant Exhibit One, Plat	7
Applicant Exhibit One-A, Plat	7
Applicant Exhibit Two, Log	8
Applicant Exhibit Two-A, Log	8
Applicant Exhibit Two-B, Log	8
Applicant Exhibit Three, Sketch	9
Applicant Exhibit Four, Sketch	10
Applicant Exhibit Four-A, Sketch	10

MR. STAMETS: We'll call Case 7331.

MR. PEARCE: Application of Bass Enterprises Production Company and possible dual completion or downhole commingling, Roosevelt County, New Mexico.

MR. COFFIELD: Conrad Coffield, with the Hinkle law firm, appearing on behalf of the applicant, and I have one witness to be sworn.

(Witness sworn.)

JANEED JUDAH

being called as a witness and being duly sworn upon her oath, testified as follows, to-wit:

DIRECT EXAMINATION

BY MR. COFFIELD:

Q Ms. Judah, would you please state your name, your occupation and employer?

A My name is Janeen Judah, and I'm a petroleum engineer with Bass Enterprises Production Company, Post Office Box 2760, Midland, Texas, 79702.

Q Have you previously testified before the Division as an engineer?

A No, I have not.

1
2 Q For the Examiner's benefit, would you
3 please give a brief resume of your educational background
4 and work experience?

5 A I attended Texas A&M University and
6 graduated in December of 1980 with a BS degree in petroleum
7 engineering.

8 I've been a member of the Society of
9 Petroleum Engineers of AIME since 1977. Since joining Bass
10 last January my production responsibilities have consisted
11 solely of New Mexico properties, including the Bass State No.
12 2 Well.

13 Q Are you familiar with -- you say you're
14 familiar then with this property and the proposed well loca-
15 tion involved?

16 A Yes, sir, I am.

17 Q And are you familiar with Bass' applica-
18 tion in this case?

19 A Yes, sir, I am.

20 MR. COFFIELD: Does the Examiner have
21 any other questions of the --

22 MR. STAMETS: No, the witness is consi-
23 dered qualified.

24 MR. COFFIELD: Mr. Examiner, before we
25 begin with the case here, I want to point out what turns out

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2 to be an error in the description of the acreage which we
3 indicated in the application would be dedicated to the well, if
4 it turns out to be an oil well. It says there the southeast
5 of the southeast of Section 16 to be dedicated as an oil com-
6 pletion, and in fact it turns out that with 80-acre spacing
7 for this particular formation, so that would have to be the
8 east half of the southeast quarter be dedicated to the well.

9 And if the Examiner please, we'd like to
10 present the case with that amendment to the application.

11 MR. STAMETS: Okay, I don't see that
12 that is a significant error in the advertisement and we'll
13 proceed along those lines.

14 MR. COFFIELD: Thank you.

15 Q MS. Judah, what is it that Bass Enter-
16 prises Production Company seeks by this application?

17 A Bass seeks approval for the unorthodox
18 location of its Bass State No. 2 Well, located 554 feet from
19 the south line and 554 feet from the east line of Unit C,
20 Section 16, Township 7 South, Range 35 East, Roosevelt County,
21 New Mexico, for the Todd Upper San Andres Pool.

22 Bass also seek permission to dually
23 complete the well by means of a conventional tubing-tubing-
24 casing annulus in the event that the well is productive of
25 oil from one pool and gas from the other from the Todd Lower

San Andres and Todd Upper San Andres Pools respectively.

In the alternative event that the zones both produce either oil or gas, Bass seeks permission to downhole commingle both zones.

The acreage dedicated to this well includes the east half, 320 acres, for a gas well, and the east half of the southeast quarter, 80 acres, for an oil well.

Q Ms. Judah, would you please give a brief history of this particular well?

A Bass State No. 2 was spudded on June 19th, 1981, and reached a total depth of 8250 feet in the Granite Wash on July 17th, 1981.

The well's primary objective was the Wolfcamp and the well was drilled and permitted as such. After logging the Wolfcamp pay zones were tested and found to be unproductive.

The well was subsequently plugged back to the San Andres and casing was set. Upon receipt of a copy of the logs, Paul Kautz, geologist with the New Mexico Oil Conservation Division in Hobbs advised us that the well was to be included in both the Todd Upper and Lower San Andres Pools. The complications of completing the well resulting from this decision resulted in our case before you today.

1
2 Q All right. Now, Ms. Judah, would you
3 please refer to what we've marked as Exhibits One and One-A
4 and explain these exhibits to the examiner?

5 A Exhibit One is a land plat of Township
6 7 South, Range 35 East, Roosevelt County, New Mexico, with
7 Bass acreage outlined in yellow. As described by the legend,
8 the wells in this area are identified by pool and status.
9 Those wells that are currently active are indicated by a
10 circle; those that are not currently active are indicated by
11 a square, whether they are plugged and abandoned, temporarily
12 abandoned, or merely shut-in.

13 Those in the Todd Lower San Andres Pool
14 are indicated in red; those in the Todd Upper San Andres Pool
15 are in green; those in the Todd - Wolfcamp Pool are indicated
16 in blue; those in the northwest Todd San Andres Pool are in
17 purple; those in the Baker San Andres Pool are in pink.

18 Exhibit One-A is a plat showing the
19 orthodox locations and proration units for the Todd Field
20 area. I will demonstrate for clarity, using the overlays
21 here.

22 The gas proration unit for the Upper Pool
23 is as shown in yellow, is the east half 320 acres, and the
24 oil proration unit, which would be for the lower pool, is the
25 east half of the southeast quarter, 80 acres, which is shown

1
2 in blue.

3 The orthodox locations for the Todd
4 Upper San Andres Pool, which is the northeast quarter and
5 southwest quarter of any given section, are outlined in green.
6 The orthodox locations for the Todd Lower San Andres and
7 Northwest Todd San Andres are shown by the red and blue circles
8 respectively.

9 There are no special rules for the Todd-
10 Wolfcamp Pool in this area.

11 The nearest orthodox location for the
12 indicated pools in the east half proration unit is 2086 feet
13 from the north line and 554 feet from the east line, which
14 would be about right here.

15 Q Okay, Ms. Judah, is -- recapping, using
16 this same exhibit, would you please explain to the Examiner
17 exactly what the current well location is orthodox as to?

18 A Okay. The well location as it is now
19 is orthodox for the Todd Lower San Andres and the Northwest
20 Todd San Andres Pools. It is unorthodox for the Todd Upper
21 San Andres Pool because by the pool rules for that pool only
22 the northeast and southwest quarters are orthodox.

23 Q Okay, now go to what we've marked as
24 Exhibits Two, Two-A, and Two-B and explain what these repre-
25 sent.

1
2 A Exhibits Two, Two-A, and Two-B are the
3 open hole compensated neutron formation density dual laterlog
4 micro-SFL and botton hole compensated sonic logs run on the
5 Bass State No. 2. Formation tops are indicated as well as the
6 proposed perforations and the New Mexico Oil Conservation
7 Division given boundary between the Todd Upper San Andres Pool
8 and the Todd Lower San Andres Pool.

9 Please note the minimal vertical separa-
10 tion between the two pools, only 26 feet between our chosen
11 perforations. With this small spacing and the fracture treat-
12 ments necessary to make wells in the area productive in the
13 San Andres, insuring positive separation of the two zones
14 cannot be guaranteed. Mechanical separation of the two zones
15 is difficult, if not impossible. Bass requests that we be
16 allowed to commingle the two zones if upon production testing
17 the zones prove to produce compatible hydrocarbons. Upon
18 commingling production would be allocated to each zone by the
19 initial potential test.

20 Q All right, Ms. Judah, now go to Exhibit
21 Three and explain that exhibit to the examiner.

22 A If a dual completion is deemed necessary,
23 Exhibit Three is a diagrammatic sketch of the well as it is
24 planned for dual completion.

25 The sketch shows the location of perfor-

1
2 ations, packers, and production from each zone.

3 In the event that the upper zone pro-
4 duces excessive fluid, provisions have been made for the in-
5 stallation of a siphon string to the zone to allow for swabbing,
6 if necessary. Bass will wireline set the packer and check the
7 depth with a gamma ray casing collar locator log to insure
8 the correct setting depth.

9 Q Next, Ms. Judah, we have Exhibits Four
10 and Four-A. Would you please explain those?

11 A Exhibit Four is a graphical sketch
12 showing the relationship between the internal yield of the
13 casing and the anticipated pressure as a function of depth.
14 Exhibit Four shows the calculations for internal yield of
15 the casing and anticipated pressure. Internal yield is cal-
16 culated using Barlow's formula.

17 Q Tell me what studies you might have done
18 on this well relative to the economics of the well.

19 A I've studied the completion economics
20 of the well, and the incremental cost of dually completing
21 the well as opposed to downhole commingling of the two zones,
22 is \$62,500. The cost of drilling and completing an additional
23 well to the Lower San Andres would be \$450,000.

24 Q Ms. Judah, in this instance, in connection
25 with this particular well, if -- if the Commission, the Divi-

1
2 sion deems that dually completing the well is the best way
3 to approach this particular situation, is Bass prepared to
4 test the casing in the dual completion in accordance with the
5 Division's rules and regulations?

6 A Yes, Bass will test the casing as re-
7 quired by the Oil Conservation Division.

8 Q Were these exhibits all prepared by you
9 or under your supervision?

10 A Yes, sir, they were.

11 Q In your opinion will the approval of this
12 application by Bass prevent drilling unnecessary wells and
13 otherwise prevent waste and protect correlative rights?

14 A Yes, sir, it will.

15 MR. COFFIELD: Mr. Examiner, I move the
16 admission of the exhibits, One through Four.

17 MR. STAMETS: These exhibits will be
18 admitted.

19 MR. COFFIELD: I have no other questions
20 of Ms. Judah on direct.

21
22 CROSS EXAMINATION

23 BY MR. STAMETS:

24 Q Ms. Judah, would you reiterate under
25 what circumstances you desire downhole commingling?

1
2 A If upon production testing the two
3 zones, for example, both produce gas, we'd like to be able to
4 commingle them, or both oil. If it's unlike substances we
5 don't desire to commingle it.

6 Q And at this point you have not been able
7 to -- you don't have any tests on either zone?

8 A No, sir, we have not attempted completion
9 on the well because the procedures would be different depending
10 on the ruling of this hearing.

11 Q Okay. Do you have any evidence from
12 nearby wells or other sources as to what pressures and pro-
13 ductivity you might expect in these two zones?

14 A Yes, sir, there are several wells in the
15 vicinity; however, the closest producing well from either pool
16 is almost two miles away. Historically the wells in this
17 area have not been very prolific producers. They've been low
18 volume, long-term producers. From the lower zone maybe 20
19 barrels a day would be a reasonable average in this area.
20 Those in the upper zone produce, perhaps in the vicinity of
21 100 Mcf a day. Those are rough estimates.

22 Q It does appear that this well is located
23 rather distant from especially the Todd Lower San Andres
24 wells. I would assume that the pool boundary must have been
25 somewhat beyond what's currently producing.

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A The pool boundary for the Todd Lower San Andres Pool extends, it -- the Todd Lower San Andres Pool includes all of Section 22.

Q Okay.

A And also the Upper San Andres Pool includes all of Section 22, but Northwest Todd San Andres Pool includes only the northwest quarter of Section 16. So the three quarters of Section 16 are in no given pool at this time.

Q Is the ownership common throughout the Section 16 as to working interest, royalty interest?

A It is 100 percent Bass interest.

Q How about the royalty interest?

A It's State and it's all --

Q So that there's no difference between, say, the east half of the southeast quarter and --

A No.

Q -- the east half of the section?

A Huh-uh.

Q In the completion process, assuming that downhole commingling was given as an option, would you be able to test each zone separately and determine what pressures and productivity were?

A Theoretically that will be possible but there's always the possibility that given the small vertical

1
2 separation that we have, that when we frac these wells, we
3 could frac through the anhydrite zone that separates them and
4 have communication between the two zones. We wouldn't know
5 that until we attempted a completion.

6 Q Would you be perforating and treating
7 each zone separately or both zones at the same time?

8 A We are prepared to do it as you rule.
9 We have -- the procedure as it's written now is to do them
10 both separately.

11 Q And you're not aware of any other wells
12 in the area where the two zones have been downhole commingled?

13 A No, sir, there are no dual completions
14 in the area and to my knowledge there are no wells that at-
15 tempted production from both zones.

16 MR. STAMETS: Any other questions of
17 this witness? She may be excused.

18 Anything further in this case?

19 The case will be taken under advisement.

20
21 (Hearing concluded.)
22
23
24
25

C E R T I F I C A T E

I, SALLY W. BOYD, C.S.R., DO HEREBY CERTIFY that the foregoing Transcript of Hearing before the Oil Conservation Division was reported by me; that the said transcript is a full, true, and correct record of the hearing, prepared by me to the best of my ability.

Sally W. Boyd CSR

SALLY W. BOYD, C.S.R.

Rt. 1 Box 193-B
Santitas, N.M. 87501
Phone (505) 475-7409

I do hereby certify that the foregoing is a complete record of the proceedings in the Examiner hearing of Case No. 19 heard by me on 19.

Oil Conservation Division, Examiner

Dockets Nos. 27-81 and 28-81 are tentatively set for September 9 and September 23, 1981. Applications for hearing must be filed at least 22 days in advance of hearing date.

DOCKET: EXAMINER HEARING - WEDNESDAY - AUGUST 26, 1981

9 A.M. - OIL CONSERVATION DIVISION CONFERENCE ROOM,
STATE LAND OFFICE BUILDING, SANTA FE, NEW MEXICO

The following cases will be heard before Richard L. Stamets, Examiner, or Daniel S. Nutter, Alternate Examiner:

CASE 7329: Application of Loco Hills Water Disposal Company for an exception to Order No. R-3221, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks an exception to Order No. R-3221 to permit the commercial disposal of produced brine into several unlined surface pits located in the S/2 SW/4 SW/4 of Section 16, Township 17 South, Range 30 East.

CASE 7330: Application of Union Oil Company of California for compulsory pooling, Lea County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the Atoka and Morrow formations underlying the E/2 of Section 16, Township 22 South, Range 33 East, to be dedicated to a well to be drilled at a standard location thereon. Also to be considered will be the cost of drilling and completing said well and the allocation of the cost thereof as well as actual operating costs and charges for supervision, designation of applicant as operator of the well, and a charge for risk involved in drilling said well.

CASE 7331: Application of Bass Enterprises Production Company for an unorthodox location and possible dual completion or downhole commingling, Roosevelt County, New Mexico. Applicant, in the above-styled cause, seeks approval for the unorthodox location of its Bass State Well No. 2, a Wolfcamp test located 554 feet from the South and East lines of Section 16, Township 7 South, Range 35 East, to be plugged back and completed in the Todd Upper and/or Todd Lower San Andres Pools. Applicant further seeks authority to dually complete said well in both of said pools or, if of similar nature, i.e., gas-gas or oil-oil, to commingle the production from said pools in the wellbore. The SE/4 SE/4 of said Section 16 would be dedicated to an oil completion and the E/2 of the section to a gas completion.

CASE 7332: Application of Bass Enterprises Production Company for directional drilling and possible unorthodox location, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks authority to directionally drill its James Ranch Well No. 13 from a surface location 660 feet from the South line and 1340 feet from the East line of Section 36, Township 22 South, Range 30 East, in such a manner as to penetrate the various pays in the Pennsylvania formation at various distances from the outer boundary of the proposed proration unit, being the S/2 of Section 31, Township 22 South, Range 31 East, but in no event closer than an unorthodox location 660 feet from the outer boundary of said unit.

CASE 7333: Application of Coquina Oil Corporation for compulsory pooling, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the Wolfcamp and Pennsylvanian formations underlying the N/2 of Section 14, Township 24 South, Range 28 East, to be dedicated to a well to be drilled at a standard location thereon. Also to be considered will be the cost of drilling and completing said well and the allocation of the cost thereof as well as actual operating costs and charges for supervision, designation of applicant as operator of the well, and a charge for risk involved in drilling said well.

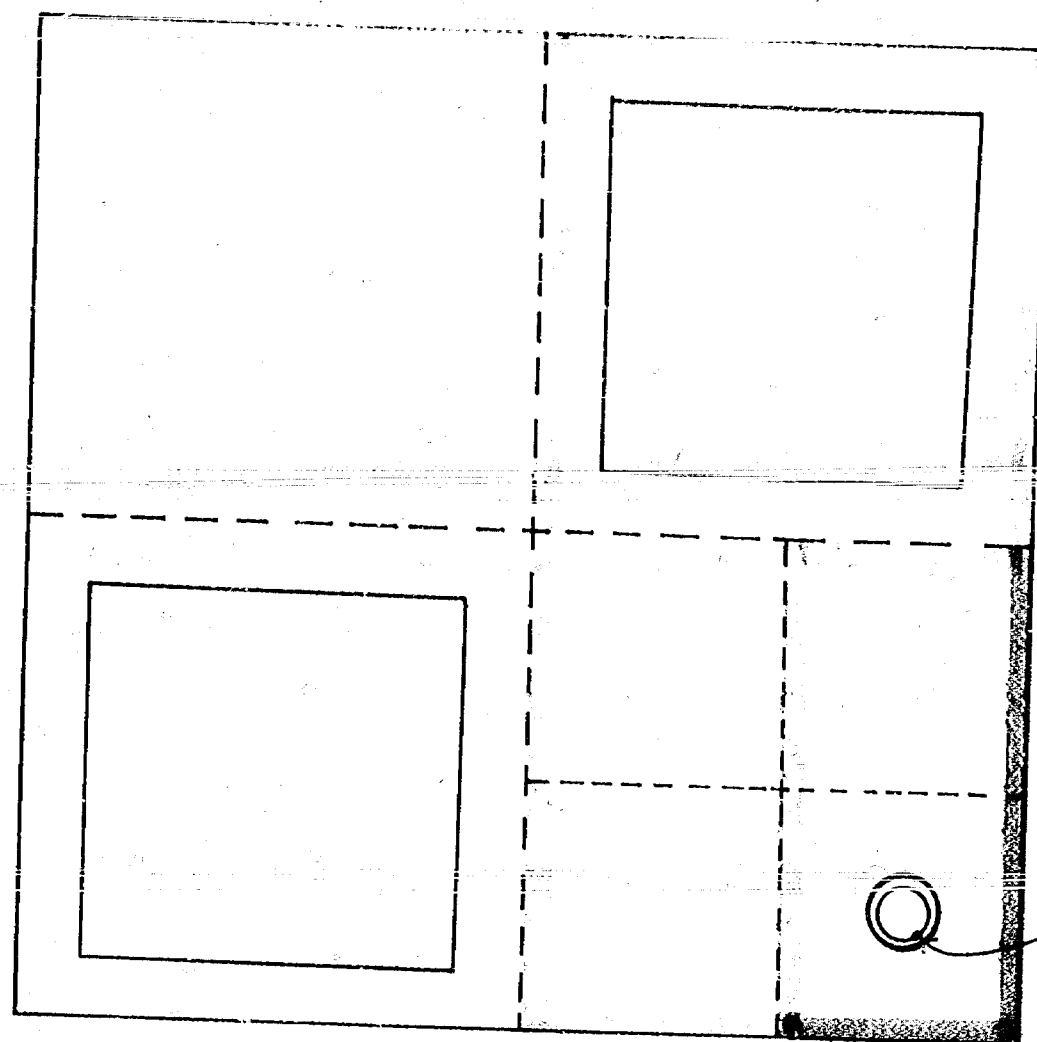
CASE 7334: Application of R. A. Mendenhall Associates, Ltd. for compulsory pooling, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the Delaware Mountain Group formation underlying the NW/4 SE/4 of Section 10, Township 22 South, Range 27 East, to be dedicated to a well to be drilled at a standard location thereon. Also to be considered will be the cost of drilling and completing said well and the allocation of the cost thereof as well as actual operating costs and charges for supervision, designation of applicant as operator of the well, and a charge for risk involved in drilling said well.

CASE 7315: (Continued and Readvertised)

Application of Rhema Oil Processing for an oil treating plant permit, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority for the construction and operation of an oil treating plant for the purpose of treating and reclaiming sediment oil at a site in the SW/4 NE/4 NW/4 of Section 14, Township 20 South, Range 38 East.

BASS ENTERPRISES PRODUCTION CO.
WEST TEXAS DIVISION

ORTHODOX LOCATIONS AND PRORATION UNITS
TODD FIELD AREA
ROOSEVELT COUNTY, NEW MEXICO



LEGEND

Orthodox Locations

- Todd Upper San Andres
- Todd Lower San Andres
- Northwest Todd San Andres

Proration Units

- Gas
- Oil

Scale: 1" = 1000'

BEFORE EXAMINER STAMETS
OIL CONSERVATION DIVISION
EXHIBIT NO. 1A
CASE NO. 7331
Submitted by Bass
Hearing Date 8-26-81

BASS ENTERPRISES PRODUCTION CO.

WEST TEXAS DIVISION

BEFORE EXAMINER STAMETS

PROPOSED INSTALLATION

OIL CONSERVATION DIVISION

BASS STATE NO. 2

EXHIBIT NO. 3

ROOSEVELT COUNTY, NEW MEXICO

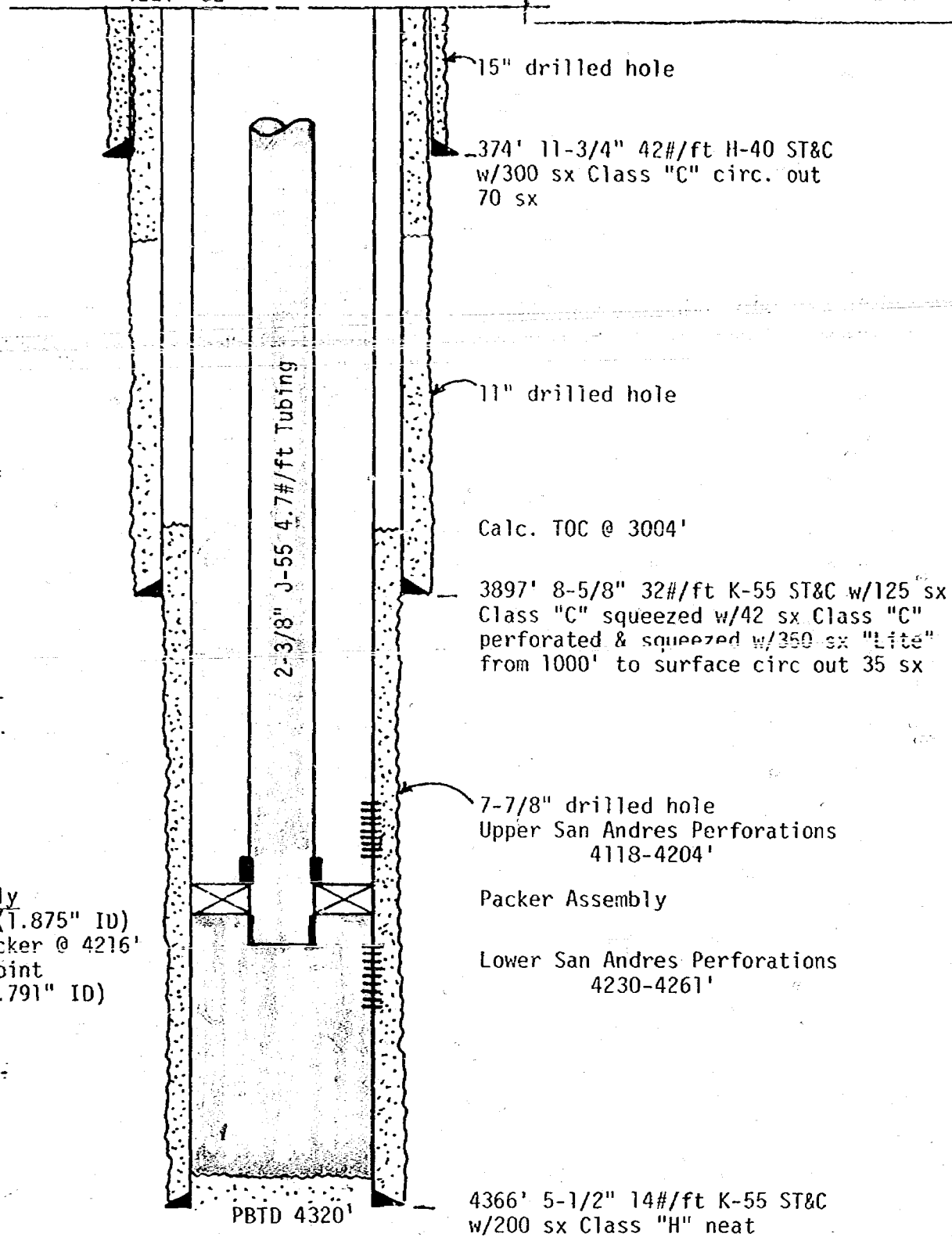
CASE NO. 7331

Submitted by Pass

Hearing Date 8-26-81

Elevations: 4233' KB
4221' GL

Packer Assembly
Otis Circ Sleeve (1.875" ID)
Otis Permalach Packer @ 4216'
3' x 2-3/8" pup joint
Otis XN nipple (1.791" ID)



BASS ENTERPRISES PRODUCTION CO.
WEST TEXAS DIVISION

BASS STATE NO. 2
TODD (UPPER/LOWER SAN ANDRES) POOL
P-16-7S-35E
ROOSEVELT COUNTY, NEW MEXICO

Internal Yield Strength of Casing

$$P_i = \frac{1.75 Y_m}{d_e/t} \quad (\text{Barlow's Formula})$$

P_i = internal yield pressure

Y_m = minimum yield strength

d_e/t = ratio of pipe diameter to wall thickness

$$P_i = \frac{1.75 (55,000)}{22.54} = 4270 \text{ psi}$$

Pressure at Depth

$$P = .052 (M)(D)$$

P = pressure at depth

M = mud weight, ppg

D = depth, feet

$$P = .052 (8.4)(4320) = 1887 \text{ psi}$$

BEFORE EXAMINER STAMETS
OIL CONSERVATION DIVISION

EXHIBIT NO. 4A

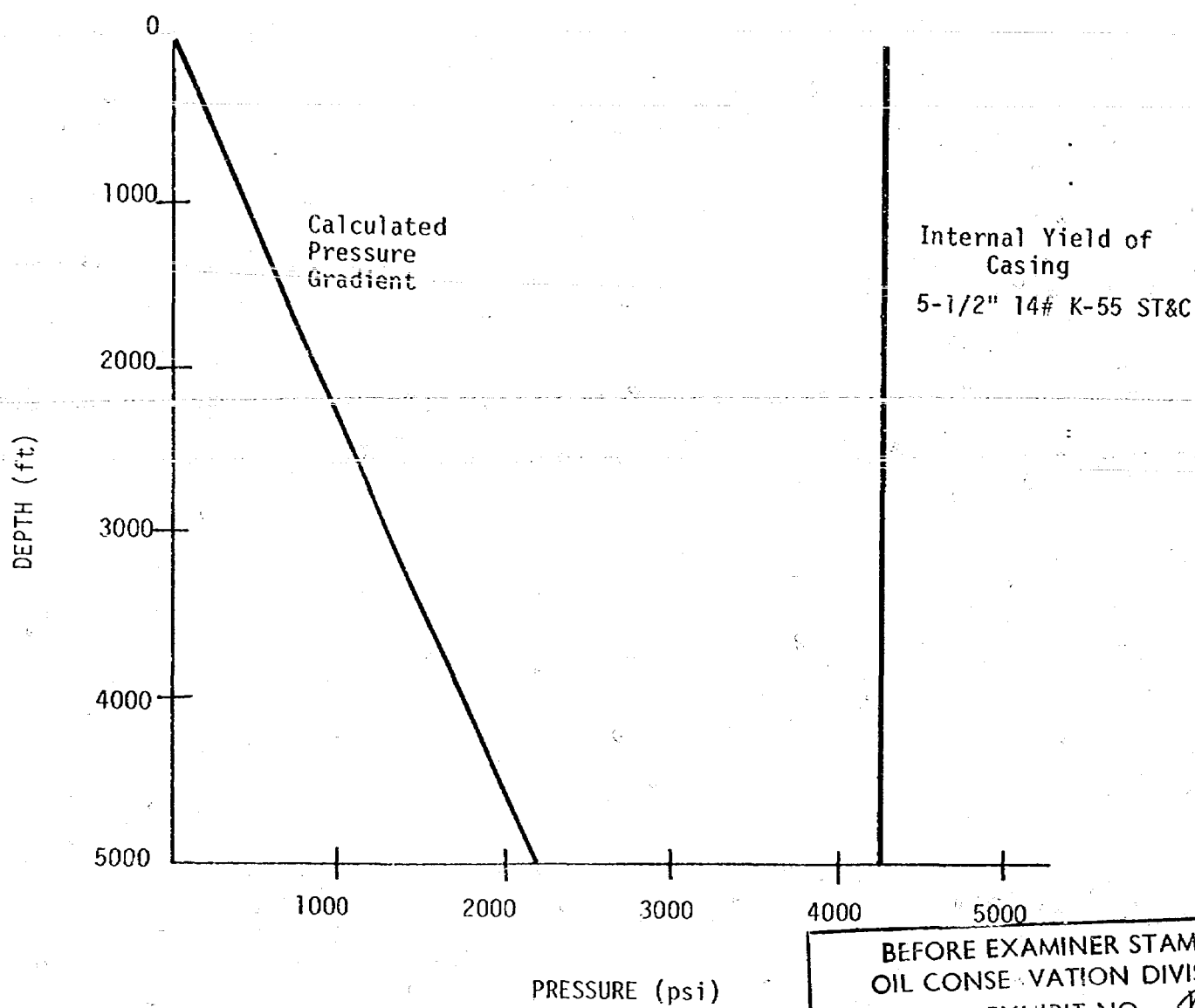
CASE NO. 7331

Submitted by Bass

Hearing Date 8-26-81

BASS ENTERPRISES PRODUCTION CO.
WEST TEXAS DIVISION

PRESSURE GRADIENT FOR SAN ANDRES
VS. CASING INTERNAL YIELD



BEFORE EXAMINER STAMETS
OIL CONSERVATION DIVISION

EXHIBIT NO. 4

CASE NO. 7331

Submitted by Bass

Hearing Date 8-26-81

BASS ENTERPRISES PRODUCTION CO.

WEST TEXAS DIVISION
PROPOSED INSTALLATION
BASS STATE NO. 2
ROOSEVELT COUNTY, NEW MEXICO

BEFORE EXAMINER STAMETS
OIL CONSERVATION DIVISION

EXHIBIT NO. 3

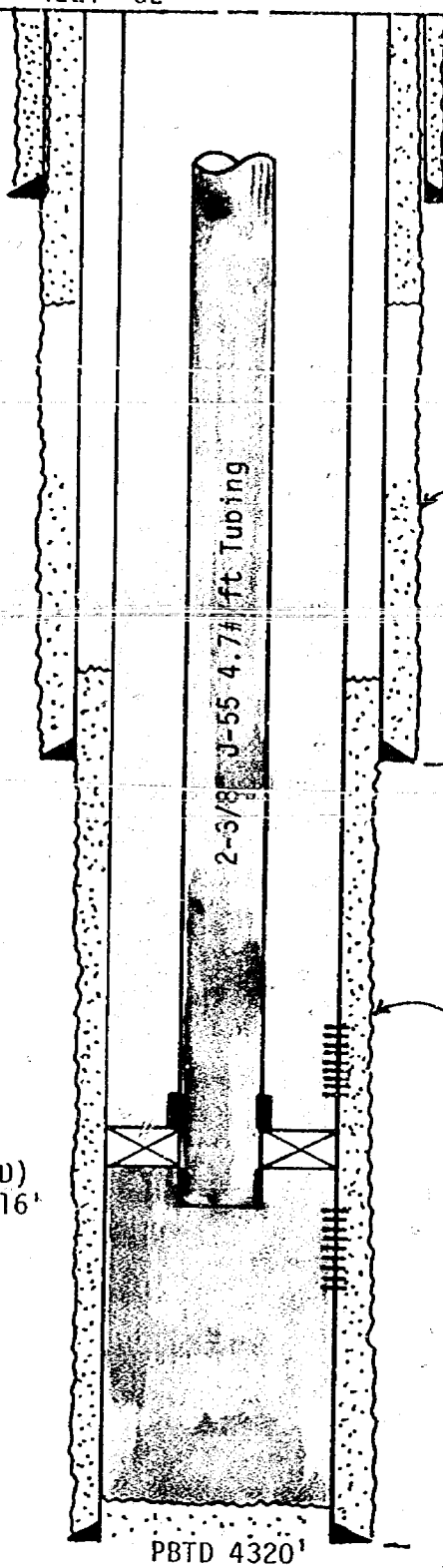
CASE NO. 7331

Submitted by BASS

Hearing Date 8-26-81

Elevations: 4233' KB
4221' GL

Packer Assembly
Otis Circ Sleeve (1.875" ID)
Otis Permalach Packer @ 4216'
3' x 2-3/8" pup joint
Otis XN nipple (1.791" ID)



15" drilled hole

374' 11-3/4" 42#/ft H-40 ST&C
w/300 sx Class "C" circ. out
70 sx

11" drilled hole

Calc. TOC @ 3004'

3897' 8-5/8" 32#/ft K-55 ST&C w/125 sx
Class "C" squeezed w/42 sx Class "C"
perforated & squeezed w/350 sx "Lite"
from 1000' to surface circ out 35 sx

7-7/8" drilled hole
Upper San Andres Perforations
4118-4204'

Packer Assembly

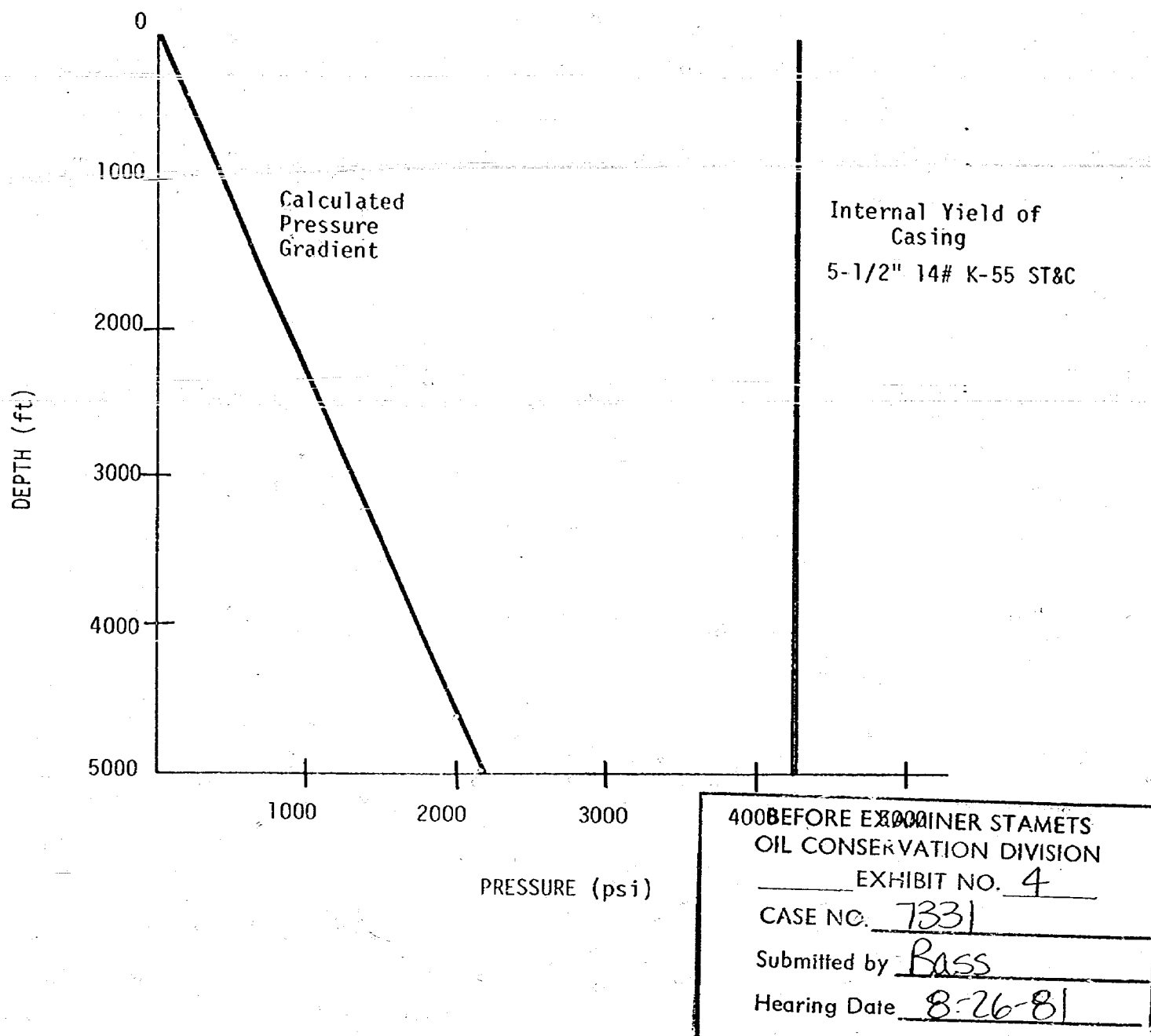
Lower San Andres Perforations
4230-4261'

PBTD 4320'

4366' 5-1/2" 14#/ft K-55 ST&C
w/200 sx Class "H" neat

BASS ENTERPRISES PRODUCTION CO.
WEST TEXAS DIVISION

PRESSURE GRADIENT FOR SAN ANDRES
VS. CASING INTERNAL YIELD



BASS ENTERPRISES PRODUCTION CO.
WEST TEXAS DIVISION

BASS STATE NO. 2
TODD (UPPER/LOWER SAN ANDRES) POOL
P-16-7S-35E
ROOSEVELT COUNTY, NEW MEXICO

Internal Yield Strength of Casing

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$$P = .052 (M)(D)$$

P = pressure at depth

M = mud weight, ppg

D = depth, feet

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BEFORE EXAMINER STAMETS
OIL CONSERVATION DIVISION
EXHIBIT NO. 4A

CASE NO. 7331

Submitted by Bass

Hearing Date 8-26-81

LAW OFFICES

HINKLE, COX, EATON, COFFIELD & HENSLEY

W. E. BONDURANT, JR.
(1914-1973)

OF COUNSEL

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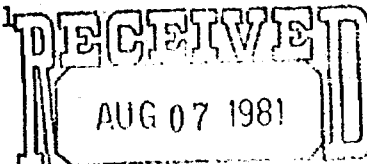
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1701 AMERICAN NATIONAL BANK BUILDING

(806) 372-5569

*NOT LICENSED IN
TEXAS

August 4, 1981



OIL CONSERVATION DIVISION
SANTA FE

Case 7331

Mr. Dan Nutter
Oil Conservation Division
Post Office Box 2088
Santa Fe, New Mexico 87501

Re: Bass Enterprises Production
Company Application for
August 26, 1981 Docket

Dear Dan:

I am transmitting herewith, executed in triplicate, copies of an Application for Bass Enterprises Production Company for unorthodox location and dual completion or, in the alternative, for unorthodox location and downhole commingling its Bass State No. 2 Well located 554 feet from the South line and 554 feet from the East line of Section 16, Township 7 South, Range 35 East, N.M.P.M., Roosevelt County, New Mexico.

We would ask that this matter please be placed on the docket for August 26, 1981.

If any additional materials or information is required, please advise.

Very truly yours,

HINKLE, COX, EATON,
COFFIELD & HENSLEY

Conrad E. Coffield

CEC:rh
Enclosures

xc: Mr. Steve Rowland
xc: Ms. Janeen Judah

BEFORE THE OIL CONSERVATION DIVISION OF
THE DEPARTMENT OF ENERGY AND MINERALS
STATE OF NEW MEXICO

APPLICATION OF BASS ENTERPRISES)
PRODUCTION COMPANY FOR UNORTHODOX)
LOCATION AND DUAL COMPLETION)
OR, IN THE ALTERNATIVE, FOR)
UNORTHODOX LOCATION AND FOR)
DOWNHOLE COMMINGLING, ROOSEVELT)
COUNTY, NEW MEXICO)

APPLICATION

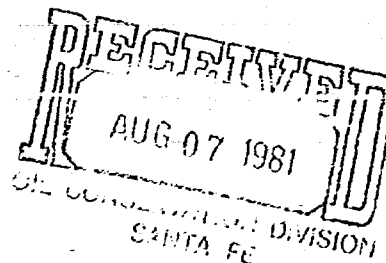
Case 7331

COMES NOW the undersigned as attorneys on behalf of Bass Enterprises Production Company and files this written application for hearing to be set on the docket for August 26, 1981, and in connection therewith, the undersigned, on behalf of Bass Enterprises Production Company, submits the following:

1. Applicant seeks approval for the unorthodox location of its Bass State No. 2 Well located 554 feet from the South line and 554 feet from the East line of Section 16, Township 7 South, Range 35 East, N.M.P.M., Roosevelt County, New Mexico. Said well has been drilled and Applicant is awaiting the completion of said well. Preliminary indications are that said well will be productive of either oil or gas from both the Todd San Andres Upper Pool and the Todd San Andres Lower Pool.

2. Applicant is advised that said well is located at an orthodox location for production from the Todd San Andres Lower Pool but is at an unorthodox location if it is productive from the Todd San Andres Upper Pool. Applicant accordingly seeks approval for the location of said well relative to production from both the Todd San Andres Upper and Lower Pools.

3. Preliminary studies of said well indicate that it may ultimately be productive of oil in one of the above specified pools and gas in the other such pool. In the event of such an occurrence, Applicant seeks authority to dually complete said well by way of a conventional tubing--tubing casing annulus



method.

4. In the alternative, said well may be productive of oil in both of said formations or gas in both of said formations and in the event of this contingency, Applicant seeks authority to downhole commingle production from both of said pools.

5. Applicant seeks to dedicate the SE $\frac{1}{4}$ SE $\frac{1}{4}$ Section 16, Township 7 South, Range 35 East, N.M.P.M., Roosevelt County, New Mexico, to said well as to oil production therefrom and seeks to dedicate the E $\frac{1}{2}$ of said Section 16, Township 7 South, Range 35 East, N.M.P.M., Roosevelt County, New Mexico, to said well as to gas production therefrom.

6. Approval of the unorthodox location and the alternative approval to either dually complete said well or complete said well with downhole commingling as specified above will be in the interest of conservation, prevention of waste and protection of correlative rights.

7. Applicant respectfully requests that this Application be set on the August 26, 1981 docket.

DATED this 4th day of August, 1981.

Respectfully submitted,

HINKLE, COX, EATON,
COFFIELD & HENSLEY

By: 

Conrad E. Coffield
Post Office Box 3580
Midland, Texas 79702
Attorneys for Bass
Enterprises Production
Company

BEFORE THE OIL CONSERVATION DIVISION OF
THE DEPARTMENT OF ENERGY AND MINERALS
STATE OF NEW MEXICO

APPLICATION OF BASS ENTERPRISES)
PRODUCTION COMPANY FOR UNORTHODOX)
LOCATION AND DUAL COMPLETION)
OR, IN THE ALTERNATIVE, FOR)
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DOWNHOLE COMMINGLING, ROOSEVELT)
COUNTY, NEW MEXICO)

Case 7331

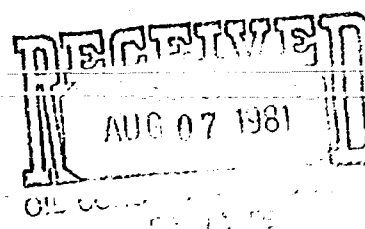
APPLICATION

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DATED this 4th day of August, 1981.

Respectfully submitted,

HINKLE, COX, EATON,
COFFIELD & HENSLEY

By: 
Conrad E. Coffield
Post Office Box 3580
Midland, Texas 79702
Attorneys for Bass
Enterprises Production
Company

BEFORE THE OIL CONSERVATION DIVISION OF
THE DEPARTMENT OF ENERGY AND MINERALS
STATE OF NEW MEXICO

APPLICATION OF BASS ENTERPRISES)
PRODUCTION COMPANY FOR UNORTHODOX)
LOCATION AND DUAL COMPLETION)
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Case 7331

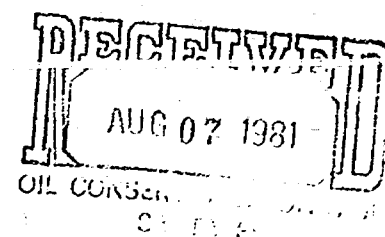
APPLICATION

COMES NOW the undersigned as attorneys on behalf of Bass Enterprises Production Company and files this written application for hearing to be set on the docket for August 26, 1981, and in connection therewith, the undersigned, on behalf of Bass Enterprises Production Company, submits the following:

1. Applicant seeks approval for the unorthodox location of its Bass State No. 2 Well located 554 feet from the South line and 554 feet from the East line of Section 16, Township 7 South, Range 35 East, N.M.P.M., Roosevelt County, New Mexico. Said well has been drilled and Applicant is awaiting the completion of said well. Preliminary indications are that said well will be productive of either oil or gas from both the Todd San Andres Upper Pool and the Todd San Andres Lower Pool.

2. Applicant is advised that said well is located at an orthodox location for production from the Todd San Andres Lower Pool but is at an unorthodox location if it is productive from the Todd San Andres Upper Pool. Applicant accordingly seeks approval for the location of said well relative to production from both the Todd San Andres Upper and Lower Pools.

3. Preliminary studies of said well indicate that it may ultimately be productive of oil in one of the above specified pools and gas in the other such pool. In the event of such an occurrence, Applicant seeks authority to dually complete said well by way of a conventional tubing--tubing casing annulus



method.

4. In the alternative, said well may be productive of oil in both of said formations or gas in both of said formations and in the event of this contingency, Applicant seeks authority to downhole commingle production from both of said pools.

5. Applicant seeks to dedicate the SE $\frac{1}{4}$ SE $\frac{1}{4}$ Section 16, Township 7 South, Range 35 East, N.M.P.M., Roosevelt County, New Mexico, to said well as to oil production therefrom and seeks to dedicate the E $\frac{1}{2}$ of said Section 16, Township 7 South, Range 35 East, N.M.P.M., Roosevelt County, New Mexico, to said well as to gas production therefrom.

6. Approval of the unorthodox location and the alternative approval to either dually complete said well or complete said well with downhole commingling as specified above will be in the interest of conservation, prevention of waste and protection of correlative rights.

7. Applicant respectfully requests that this Application be set on the August 26, 1981 docket.

DATED this 4th day of August, 1981.

Respectfully submitted,

HINKLE, COX, EATON,
COFFIELD & HENSLEY

By: 

Conrad E. Coffield
Post Office Box 3580
Midland, Texas 79702
Attorneys for Bass
Enterprises Production
Company

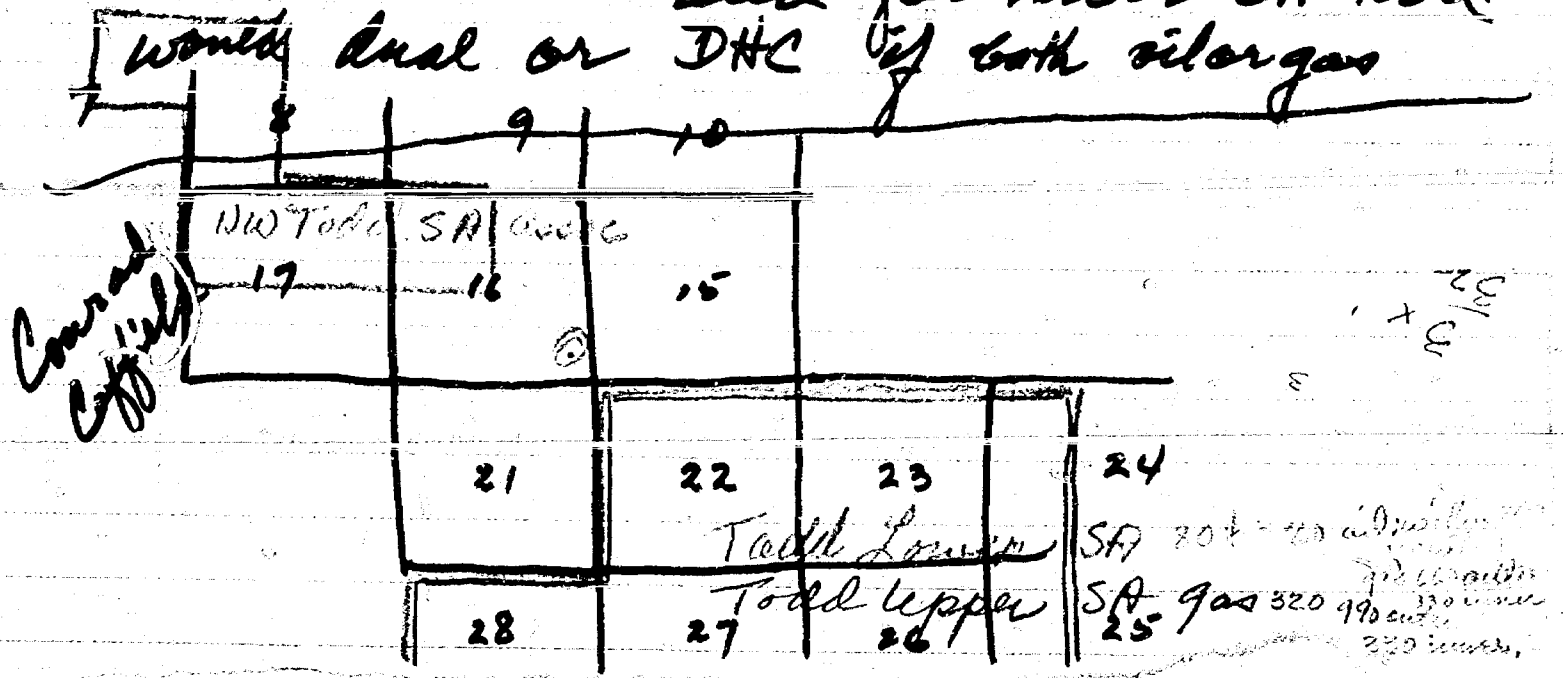
Application of Bass Enterprises Production
Co for an ~~unorthodox~~ location and
possible dual completion or down hole
commingling, Roosevelt County, New Mexico.

Applicant, in the above styled cause, seeks
approval for the ~~unorthodox~~ location of its
Bass Shale Well No. 2, a wellcamp test
located 554 feet from the South and East
lines of Section 16, Township 7 South, Range
35 East, to be plugged back and completed
in the Todd Upper and/or Todd Lower
Pools. Applicant ~~for this~~ ^{for this} ~~seeks~~ ^{seeks} authority, to ~~actually~~
~~complete~~ said well in the both of said pools
or, ~~if of unusual nature~~, to ~~complete~~ commingle
the production from said pools in the well bore.
if of similar nature, i.e., gas-gas or oil-oil.

Called in by Conrad Caffield, 8/3/81
written appl to follow.

554' FS DEL

Base Str # 2 75 35E ^{Sec 16}
orthodox loc west (40 acres)
upper & lower ^{unmarked loc} Total SA Pools
orthodox for WC
and for lower SA Todd.
would dual or DHC if both oil & gas



DRAFT

dr/

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION

IN THE MATTER OF THE HEARING
CALLED BY THE OIL CONSERVATION
DIVISION FOR THE PURPOSE OF
CONSIDERING:

CASE NO. 7331

ORDER NO. R- 6775

APPLICATION OF BASS ENTERPRISES PRODUCTION COMPANY

FOR AN UNORTHODOX GAS WELL LOCATION, AND POSSIBLE DUAL COMPLETION
OR DOWNHOLE COMMINGLING,
ROOSEVELT COUNTY, NEW MEXICO.

ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 9 a.m. on August 26,
19 81, at Santa Fe, New Mexico, before Examiner Richard L. Stamets

NOW, on this September, 1981, the Division
Director, having considered the testimony, the record, and the
recommendations of the Examiner, and being fully advised in the
premises,

FINDS:

(1) That due public notice having been given as required by
law, the Division has jurisdiction of this cause and the subject
matter thereof.

(2) That the applicant, Bass Enterprises Production Company,
for its Bass State Well No. 2,
seeks approval of an unorthodox gas well location / 554

feet from the South line and 554 feet from the

East line of Section 16, Township 7 South

Range 35 East, NMPM, to test the ^{upper and lower zones of the} ~~well~~ ^{wellbore}
formation, said well ^{being} ~~to be~~ plugged back ^{from the wellbore formation} ~~pool~~, and completed in the Todd
County, New Mexico ^{San Andres} ~~County, New Mexico~~ ^{Upper and/or Todd Lower San Andres Pools, Roosevelt County, New Mexico.}

~~XXXXXX~~ ^{E/2} ~~SE/4 of said Section 16 would be dedicated to~~
(4) That the ~~XXXXXX of said Section~~ ^{SE/4 of said Section 16 would be dedicated to}
an oil completion and the E/2 of the section to a gas completion.
~~dedicated to the well~~ ^{XXXXXX}

(5) That ^{said well was originally drilled at a standard} ~~a well at said unorthodox location will better~~
^{location for the wellbore formation} ~~enable applicant to produce the gas underlying the proration unit~~

(6) That no offset operator objected to the proposed unorthodox
location.

(3) Applicant further seeks authority to dually complete said
well in both of said pools or, if of similar nature, i.e., gas-gas or
oil-oil, to commingle the production from said pools in the wellbore.

(7) That the mechanics of the proposed dual completion are feasible and in accord with good conservation practices.

(8) That the Division Director should be authorized to administratively approve the down-hole commingling in the wellbore of production from the upper and lower San Andres zones ~~and~~ upon application and a proper showing.

(9) That approval of the subject application will afford the applicant the opportunity to produce its just and equitable share of the ^{oil and/or gas} gas in the subject pools will prevent the economic loss caused by the drilling of unnecessary wells, avoid the augmentation of risk arising from the drilling of an excessive number of wells, and will otherwise prevent waste and protect correlative rights.

IT IS THEREFORE ORDERED:

(1) That an unorthodox location is hereby approved @ for the Bass Enterprises Production Company (operator for Perry R. Bass) Bass State Well No. 2 ~~is~~ located at a point 554 feet from the South line and 554 feet from the East line of Section 16, Township 16 South, Range 35 East, NMPM, Todd-Upper San Andres Gas Pool and Todd-Lower San Andres Associated Pool, Roosevelt County, New Mexico.

~~That~~ (2) ^{E/2} ~~SE/4~~ of said Section 16 ^{shall} ~~would~~ be dedicated to an oil completion and the E/2 of the section to a gas completion. ~~the above described well~~ ~~of said Section~~ ~~shall be dedicated to~~ ~~the above described well~~

(3) That the applicant is
is hereby authorized to complete its Said Bass State
Well No. 2, located in Unit 1 of Section 1
Township 1, Range 1, NMDM,
County, New Mexico, as a dual completion (conventional)
(combination)
(tubingless)

to produce ^{oil} ~~gas~~ from ~~the~~ The Upper San Andres ^{gas} zone through the casing-
Tubing annulus and the Lower San Andres zone through tubing with
separation of the zones to be achieved by means of a
packer set at approximately 4216 feet.

PROVIDED HOWEVER, that the applicant shall complete, operate,
and produce said well in accordance with the provisions of Rule
112-A of the Division Rules and Regulations insofar as said rule
is not inconsistent with this order;

PROVIDED FURTHER, that the applicant shall take
packer leakage tests upon completion and
annually thereafter during the ^{lost} ~~Annual~~ Gas Well Shut-In ^{liquid level test}
Test Period for ~~the~~ wells in the Vodd-Lower San Andres Associated Pool.

- (4) That the Division Director is hereby ~~authorized~~ ^{hereby}
authorized to administratively approve
the down-hole commingling in the wellbore
of production from the upper and lower
San Andres zones ~~upon~~ ^{upon} application
and a proper showing: ~~that~~ ^{that}:
(a) ~~that~~ both zones are ~~oil zones or gas~~
classified as oil zones or gas zones;
(b) ~~a demonstration~~ ^{that} pressures of the
two zones are compatible;
(c) evidence establishing the ratio of production
to be assigned each zone; and,
(d) ~~that~~ ^{that} the combined value of
the production shall not be diminished
by the proposed commingling.

(5) That jurisdiction of this cause is retained for the
entry of such further orders as the Division may deem necessary.

DONE at Santa Fe, New Mexico, on the day and year hereinabove
designated.